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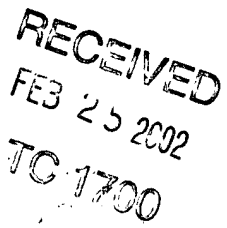

Serial No.: 10/044,767

Filed: January 10, 2002

Applicant: Mark Mattox

Title: METHOD TO REMOVE IRON SULFIDE DEPOSITS FROM PIPE LINES

INFORMATION DISCLOSURE STATEMENT

U.S. Patent and Trademark Office
P.O. Box 2327
Arlington, VA 22202

Dear Sir:

Applicant hereby submits an information disclosure statement and an accompanying form 1449. The prior art references are as follows:

Larsen et al., Experience with the Use of Tetrakishydroxymethylphosphonium Sulfate (THPS) for the Control of Downhole Hydrogen Sulfide, Corrosion 2000 (2000) discloses iron sulfide dissolution by THPS in an oil well. It is further noted that ammonium ions increase iron uptake. FIG. 17

H.A. Nasr-El-Din, Iron Sulfide Formation in Water Supply Wells with Gas Lift, SPE 65028 (Feb. 2001). This article discloses the production of iron sulfide in water wells. Iron sulfide scale were reduced by treatment with two chemicals: a corrosion inhibitor and tetrakishydroxyl phosphonium sulfate (THPS) at p. 5.

Haack, et al. "TetrakisHydroxymethylPhosphonium Sulfate (THPS): A New Oilfield Bactericide Providing Iron Sulfide Dissolution and Environmental Benefits", discloses the use of tetrakishydroxmethyl phosphonium sulfate to prevent iron sulfide dissolution in an oilfield.

U.K. Corrosion '98 – A presentation delivered at UK Corrosion Conference, held at Sheffield, U.K. in November 1998. It summarizes field experience with a THPS formulation in the Ninian field in the North Sea. Data is presented showing that THPS, dosed to injection water, was controlling H_2S generation and also that its biocidal activity survived transit through the reservoir so that it also controlled SRB activity topside in the production systems.

Corrosion 2000 – The presentation was delivered at the Corrosion 2000 conference which was held at Orlando, Florida. It summarizes field experience with a THPS formulation in the Danish sector of the North Sea where concerns had arisen regarding rising H_2S levels in produced fluids. THPS was trialled in short campaigns over the period 1994-1999 and it was clearly shown that H_2S production could be controlled by dosing THPS into injection water. A number of different dosing regimes were explored and quantified. Also, preliminary work, aimed at the evaluation of the FeS dissolving properties of THPS, was conducted.

Respectfully submitted,

BUTLER, SNOW, O'MARA, STEVENS
& CANNADA PLLC

By: Susan B. Fentress
Date: Feb. 1, 2002

Susan B. Fentress
Reg. No. 31,327
Dated: 2-1-02
Docket No.: 024016.43014

P.O. Box 171443
Memphis, TN 38187
(901) 680-7319

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, on February 1, 2002 in a package addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231

Jenna Moss